Please delete the Abstract and substitute the following Abstract.

## Abstract

A three-dimensional flow cell for aligning non-isometric particles in a liquid sample in two axes, a method of aligning non-isometric particles in a liquid sample, a reflectance sensor which has the three-dimensional flow cell according to the invention, a method of measuring the reflectance of a liquid sample containing non-isometric particles and the use of the reflectance sensor according to the invention.